Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A method for preparing an implantation space in a vertebra of the human spine, the method comprising the steps of:

positioning one end of a hollow guard in contact with ~~the exterior surface of~~ at least one vertebra, the one end of the guard having a height;

placing an instrument into~~forming, through~~ the hollow guard, the instrument having a longitudinal axis;

moving the instrument along the longitudinal axis of the instrument to form, an opening into the vertebra; and

inserting, through the hollow guard and into the opening, an implantation material suitable for human implantation of sufficient strength to support the bone of the vertebra, the implantation material rigidly stabilizing the implantation space occupied by the implantation material, the method being performed without altering the height of the one end of the guard between the forming step and the inserting step.

Claim 2 (cancelled).

3. (currently amended) The method of claim 1, wherein the moving~~forming~~ step includes the sub-steps of ~~inserting a first instrument through the guard to form an opening into the vertebra;~~ removing the ~~first~~ instrument from the guard; and inserting a second instrument through the guard to enlarge the opening.

4. (currently amended) The method of claim 1, wherein the moving~~forming~~ step includes the sub-step of drilling the vertebra.

5. (currently amended) The method of claim 1, wherein the moving step includes~~further comprising the step of~~ inserting a drill into the guard to access the vertebra with the drill.

6. (previously presented) The method of claim 1, wherein the positioning step includes the step of positioning at least a portion of the hollow guard in the vertebra.
7. (original) The method of claim 1, wherein the inserting step includes inserting the implantation material comprising a fusion-promoting substance.
8. (original) The method of claim 1, further comprising the step of inserting an inner sleeve within the guard.
9. (original) The method of claim 1, wherein the method is performed without removing the hollow guard between the positioning step and the inserting step.
10. (original) The method of claim 1, wherein the inserting step includes the sub-step of inserting an implant having at least upper and lower portions that are arcuate along at least a portion of the length of the implant.
11. (original) The method of claim 10, wherein the inserting step includes the sub-step of inserting the implant further comprising a hollow interior between the upper and lower arcuate portions of the implant for holding bone growth promoting material, each of the upper and lower portions of the implant having at least one opening in communication with the hollow interior to permit bone from the vertebra to grow through the implant.
12. (original) The method of claim 11, further comprising the step of loading the hollow interior of the implant with fusion promoting substances.
13. (original) The method of claim 12, wherein the loading step includes the sub-step of loading the hollow interior of the implant with bone.
14. (original) The method of claim 1, wherein the inserting step includes inserting the implantation material that comprises at least in part of an implantation material other than bone.
15. (original) The method of claim 1, wherein the inserting step includes the sub-step of inserting an implant having the upper and lower portions having at least one protrusion on the upper and lower portions for engaging the vertebra.

16. (original) The method of claim 15, wherein the protrusion is at least a portion of a thread.

17. (original) The method of claim 1, wherein the inserting step includes the sub-step of inserting an implant having a hollow interior and at least one of an insertion end and a trailing end that is open and adapted for loading bone growth promoting substances into the hollow interior.

18. (original) The method of claim 17, further comprising the step of engaging an end cap for closing the open end of the implant.

19. (original) The method of claim 1, wherein the inserting step includes the sub-step of inserting an implant having an insertion end and a trailing end, the trailing end being adapted to cooperatively engage a driver for inserting the implant through the hollow guard and into the opening.

20. (original) The method of claim 1, wherein the positioning step includes the step of engaging the one end of the hollow guard to the vertebra.

21. (original) The method of claim 1, wherein the positioning step includes the sub-step of positioning the guard that is a tubular sleeve that is at least in part hollow.

22. (original) The method of claim 1, wherein the positioning step includes the sub-step of positioning the guard having a length defined by a distal portion and a proximal portion forming the length, the guard having a substantially uniform cross section along its distal portion.

23. (original) The method of claim 1, wherein the positioning step includes the sub-step of positioning the guard having a substantially uniform cross section along its length.

24. (original) The method of claim 23, wherein the one end of the guard has a cross sectional configuration substantially the same as the substantially uniform cross section of the guard.

25. (original) The method of claim 1, wherein the positioning step includes the sub-step of positioning the guard having the one end having a circumference that is uninterrupted and constant.

26. (original) The method of claim 25, further comprising projections extending from the uninterrupted and constant circumference of the one end of the guard for engaging the spine.

27. (original) The method of claim 1, wherein the forming step includes the sub-step of forming an opening having arcuate portions.

28. (original) The method of claim 1, wherein the forming step includes the sub-step of forming an opening that is generally cylindrical.

29. (original) The method of claim 1, wherein the positioning step includes the step of positioning the one end of the guard in contact with the vertebra of the posterior lumbar spine.

30. (previously presented) The method of claim 1, further comprising the step of placing pressed biomaterial into the implantation space.

31. (currently amended) A method for preparing a vertebra of the human spine, comprising the steps of:

positioning one end of a guard having a passage onto ~~the exterior surface of~~ the vertebra with the passage of the guard overlapping a portion of the vertebra, the one end of the guard having a height;

forming, through the passage of the guard, an opening at least in part into the portion of the vertebra overlapped by the passage of the guard; and

inserting a biomaterial through the passage of the guard and into the opening formed in the vertebra~~through the guard~~, the method being performed without altering the height of the one end of the guard between the forming step and the inserting step.

32. (original) The method of claim 31, wherein the forming step includes the sub-step of inserting an instrument through the guard to access the bone of the vertebra.

33. (original) The method of claim 31, wherein the forming step includes the sub-step of milling the vertebra.

34. (original) The method of claim 31, wherein the forming step includes the sub-step of drilling the vertebra.

35. (original) The method of claim 31, further comprising the step of inserting a drill into the guard to access the vertebra with the drill.

36. (original) The method of claim 31, wherein the biomaterial comprises a fusion-promoting substance.

37. (original) The method of claim 31, wherein the biomaterial comprises bone.

38. (previously presented). The method of claim 31, wherein the positioning step includes the step of positioning at least a portion of the guard in the vertebra.

39. (original) The method of claim 31, further comprising the step of inserting an inner sleeve within the guard.

40. (previously presented) The method of claim 31, wherein the method is performed without removing the guard between the positioning step and the inserting step.

41. (original) The method of claim 31, wherein the forming step includes the sub-step of forming an opening having arcuate portions.

42. (original) The method of claim 31, wherein the forming step includes the sub-step of forming an opening that is generally cylindrical.

43. (original) The method of claim 31, wherein the positioning step includes the step of engaging the one end of the hollow guard to the vertebra.

44. (original) The method of claim 31, wherein the positioning step includes the sub-step of positioning the guard having projections projecting distally from the one end for penetrably engaging the posterior surface of the vertebra.

45. (original) The method of claim 31, wherein the positioning step includes the sub-step of positioning the guard that is a tubular sleeve that is at least in part hollow.

46. (original) The method of claim 31, wherein the positioning step includes the sub-step of positioning the guard having a length defined by a distal portion and a proximal portion forming the length, the guard having a substantially uniform cross section along its distal portion.

47. (original) The method of claim 31, wherein the positioning step includes the sub-step of positioning the guard having a substantially uniform cross section along its length.

48. (original) The method of claim 47, wherein the one end of the guard has a cross sectional configuration substantially the same as the substantially uniform cross section of the guard.

49. (original) The method of claim 31, wherein the positioning step includes the sub-step of positioning the guard having the one end having a circumference that is uninterrupted and constant.

50. (original) The method of claim 49, further comprising projections extending from the uninterrupted and constant circumference of the one end of the guard for engaging the spine.

51. (original) The method of claim 31, wherein the positioning step includes the step of positioning the one end of the guard in contact with the vertebra of the posterior lumbar spine.

52. (original) The method of claim 31, wherein the inserting step includes placing compressed biomaterial into the opening.

53. (previously presented) The method of claim 1, wherein the material is injectable.

54. (previously presented) The method of claim 53, further comprising the step of injecting the material that is inserted into the implantation space.

55. (previously presented) The method of claim 1, further comprising the step of providing the material to be inserted in the form of an elongated portion having a length and a maximum cross sectional dimension perpendicular to the length.

56. (previously presented) The method of claim 55, further comprising the step of pressing the provided material prior to the step of inserting the material into the implantation space.

57. (previously presented) The method of claim 55, further comprising the step of pressing the provided material to change the shape of the elongated portion to

have a lesser length and a greater maximum cross sectional dimension perpendicular to the length.

58. (previously presented) The method of claim 55, wherein the maximum cross sectional dimension perpendicular to the length is round in cross section.

59. (previously presented) The method of claim 55, wherein the length of the elongated portion is at least 32 millimeters.

60. (previously presented) The method of claim 31, wherein the biomaterial is injectable.

61. (previously presented) The method of claim 60, further comprising the step of injecting the biomaterial that is inserted into the opening.

62. (previously presented) The method of claim 31, further comprising the step of providing the biomaterial to be inserted in the form of an elongated portion having a length and a maximum cross sectional dimension perpendicular to the length.

63. (previously presented) The method of claim 62, further comprising the step of pressing the provided biomaterial prior to the step of inserting the biomaterial into the opening.

64. (previously presented) The method of claim 62, further comprising the step of pressing the provided biomaterial to change the shape of the elongated portion to have a lesser length and a greater maximum cross sectional dimension perpendicular to the length.

65. (previously presented) The method of claim 62, wherein the maximum cross sectional dimension perpendicular to the length is round in cross section.

66. (previously presented) The method of claim 62, wherein the length of the elongated portion is at least 32 millimeters.

67. (previously presented) A method for internal stabilization of at least a portion of the human spine, the method comprising the steps of:

engaging one end of a hollow tubular member with at least one vertebra of the spine, the one end of the tubular member having a height;

providing a first instrument that extends through the tubular member and beyond the one end of the tubular member;

forming an opening into the vertebra with the first instrument;

removing the first instrument from the tubular member;

inserting a second instrument through the tubular member and into the opening;

enlarging the opening with the second instrument; and

inserting, through the hollow tubular member and into the enlarged opening, a material suitable for human implantation of sufficient strength to support the bone of the vertebra, the material rigidly stabilizing at least a portion of the human spine, the method being performed without removing the hollow tubular member from the vertebra between the engaging step and the inserting material step.

68. (previously presented) The method of claim 67, wherein the method is performed without altering the height of the one end of the tubular member between the providing step and the inserting material step.

69. (previously presented) The method of claim 67, wherein the inserting step further comprises inserting a material inserter having a distal end into the hollow tubular member, the material inserter having the material extending beyond the distal end of the material inserter.

70. (previously presented) The method of claim 69, further comprising the step of positioning the material into the enlarged opening beyond the one end of the tubular member.

71. (previously presented) The method of claim 67, further comprising the steps of inserting the first instrument into the tubular member and then extending the first instrument beyond the one end of the tubular member.

72. (previously presented) The method of claim 67, wherein the providing step includes the sub-step of inserting a drill.

73. (previously presented) The method of claim 67, wherein the inserting material step includes inserting the material comprising a biomaterial into the opening through the hollow tubular member.

74. (previously presented) The method of claim 67, wherein the inserting material step includes inserting the material comprising a fusion-promoting substance.

75. (previously presented) The method of claim 67, further comprising the step of inserting an inner sleeve within the tubular member.

76. (previously presented) The method of claim 67, wherein the inserting material step includes the sub-step of inserting an implant having at least upper and lower portions that are arcuate along at least a portion of the length of the implant.

77. (previously presented) The method of claim 76, wherein the inserting material step includes the sub-step of inserting the implant further comprising a hollow interior between the upper and lower arcuate portions of the implant for holding bone growth promoting material, each of the upper and lower portions of the implant having at least one opening in communication with the hollow interior to permit bone from the vertebra to grow through the implant.

78. (previously presented) The method of claim 77, further comprising the step of loading the hollow interior of the implant with fusion promoting substances.

79. (previously presented) The method of claim 78, wherein the loading step includes the sub-step of loading the hollow interior of the implant with bone.

80. (previously presented) The method of claim 67, wherein the inserting material step includes inserting the material that comprises at least in part of a material other than bone.

81. (previously presented) The method of claim 67, wherein the inserting material step includes the sub-step of inserting an implant having the upper and lower portions having at least one protrusion on the upper and lower portions for engaging the vertebra.

82. (previously presented) The method of claim 81, wherein the protrusion is at least a portion of a thread.

83. (previously presented) The method of claim 67, wherein the inserting material step includes the sub-step of inserting an implant having a hollow interior and at least one of an insertion end and a trailing end that is open and adapted for loading bone growth promoting substances into the hollow interior.

84. (previously presented) The method of claim 83, further comprising the step of engaging an end
cap for closing the open end of the implant.

85. (previously presented) The method of claim 67, wherein the inserting material step includes the sub-step of inserting an implant having an insertion end and a trailing end, the trailing end being adapted to cooperatively engage a driver for inserting the implant through the tubular member and into the opening.

86. (previously presented) The method of claim 67, wherein the engaging step includes the step of positioning at least a portion of the tubular member in the vertebra.

87. (previously presented) The method of claim 67, wherein the engaging step includes the sub-step of engaging the tubular member having a length defined by a distal portion and a proximal portion forming the length, the tubular member having a substantially uniform cross section along its distal portion.

88. (previously presented) The method of claim 67, wherein the engaging step includes the sub-step of engaging the tubular member having a substantially uniform cross section along its length.

89. (previously presented) The method of claim 88, wherein the one end of the tubular member has a cross sectional configuration substantially the same as the substantially uniform cross section of the tubular member.

90. (currently amended) The method of claim 67, wherein the ~~positioning~~engaging step includes the sub-step of engaging the tubular member having the one end having a circumference that is uninterrupted and constant.

91. (previously presented) The method of claim 90, further comprising projections extending from the uninterrupted and constant circumference of the one end of

the tubular member for engaging the spine.

92. (previously presented) The method of claim 67, wherein the step of forming the opening with the first instrument includes the step of forming the opening having arcuate portions.

93. (previously presented) The method of claim 92, wherein the forming step includes the sub-step of forming an opening that is generally cylindrical.

94. (previously presented) The method of claim 67, wherein the engaging step includes the step of engaging the one end of the tubular member in contact with the vertebra of the posterior lumbar spine.

95. (previously presented) The method of claim 67, further comprising the step of placing pressed material into the enlarged opening.

96. (previously presented) The method of claim 67, wherein the material is injectable.

97. (previously presented) The method of claim 96, further comprising the step of injecting the material that is inserted into the enlarged opening.

98. (previously presented) The method of claim 67, further comprising the step of providing the material to be inserted in the form of an elongated portion having a length and a maximum cross sectional dimension perpendicular to the length.

99. (previously presented) The method of claim 98, further comprising the step of pressing the provided material prior to the step of inserting the material into the enlarged opening.

100. (previously presented) The method of claim 98, further comprising the step of pressing the provided material to change the shape of the elongated portion to have a lesser length and a greater maximum cross sectional dimension perpendicular to the length.

101. (previously presented) The method of claim 98, wherein the maximum cross sectional dimension perpendicular to the length is round in cross section.

102. (previously presented) The method of claim 98, wherein the length of the elongated portion is at least 32 millimeters.

103. (previously presented) A method for internal stabilization of at least a portion of the human spine, the method comprising the steps of:

positioning one end of a hollow tubular member in contact with at least one vertebra of the spine, the one end of the tubular member having a height;

providing a first instrument that extends through the tubular member and beyond the one end of the tubular member;

forming an opening into the vertebra with the first instrument;

removing the first instrument from the tubular member;

inserting a second instrument through the tubular member and into the opening;

enlarging the opening with the second instrument;

removing the second instrument from the tubular member; and

inserting a material suitable for human implantation into the enlarged opening through the tubular member.

104. (previously presented) The method of claim 103, wherein the method is performed without altering the height of the one end of the tubular member between the providing step and the inserting material step.

105. (previously presented) The method of claim 103, wherein the inserting material step further comprises inserting a material inserter having a distal end into the hollow tubular member, the material inserter having the material extending beyond the distal end of the material inserter.

106. (previously presented) The method of claim 105, further comprising the step of positioning the material into the enlarged opening beyond the one end of the tubular member.

107. (previously presented) The method of claim 103, further comprising the steps of inserting the first instrument into the tubular member and then extending the first instrument beyond the one end of the tubular member.

108. (previously presented) The method of claim 103, wherein the providing step includes the sub-step of inserting a drill.

109. (previously presented) The method of claim 103, wherein the inserting material step includes inserting the material comprising a biomaterial into the opening through the hollow tubular member.

110. (previously presented) The method of claim 103, wherein the inserting material step includes inserting the material comprising a fusion-promoting substance.

111. (previously presented) The method of claim 103, further comprising the step of inserting an inner sleeve within the tubular member.

112. (previously presented) The method of claim 103, wherein the inserting material step includes the sub-step of inserting an implant having at least upper and lower portions that are arcuate along at least a portion of the length of the implant.

113. (previously presented) The method of claim 112, wherein the inserting material step includes the sub-step of inserting the implant further comprising a hollow interior between the upper and lower arcuate portions of the implant for holding bone growth promoting material, each of the upper and lower portions of the implant having at least one opening in communication with the hollow interior to permit bone from the vertebra to grow through the implant.

114. (previously presented) The method of claim 113, further comprising the step of loading the hollow interior of the implant with fusion promoting substances.

115. (previously presented) The method of claim 114, wherein the loading step includes the sub-step of loading the hollow interior of the implant with bone.

116. (previously presented) The method of claim 103, wherein the inserting material step includes inserting the material that comprises at least in part of a material other than bone.

117. (previously presented) The method of claim 103, wherein the inserting material step includes the sub-step of inserting an implant having the upper and lower portions having at least one protrusion on the upper and lower portions for engaging the vertebra.

118. (previously presented) The method of claim 117, wherein the protrusion is at least a portion of a thread.

119. (previously presented) The method of claim 103, wherein the inserting material step includes the sub-step of inserting an implant having a hollow interior and at least one of an insertion end and a trailing end that is open and adapted for loading bone growth promoting substances into the hollow interior.

120. (previously presented) The method of claim 119, further comprising the step of engaging an end
cap for closing the open end of the implant.

121. (previously presented) The method of claim 103, wherein the inserting material step includes the sub-step of inserting an implant having an insertion end and a trailing end, the trailing end being adapted to cooperatively engage a driver for inserting the implant through the hollow tubular member and into the opening.

122. (previously presented) The method of claim 103, wherein the positioning step includes the step of engaging the one end of the hollow tubular member to the vertebra.

123. (previously presented) The method of claim 103, wherein the positioning step includes the sub-step of positioning the tubular member having a length defined by a distal portion and a proximal portion forming the length, the tubular member having a substantially uniform cross section along its distal portion.

124. (previously presented) The method of claim 103, wherein the positioning step includes the sub-step of positioning the tubular member having a substantially uniform cross section along its length.

125. (previously presented) The method of claim 124, wherein the one end of the tubular member has a cross sectional configuration substantially the same as the substantially uniform cross section of the tubular member.

126. (previously presented) The method of claim 103, wherein the positioning step includes the sub-step of positioning the tubular member having the one end having a circumference that is uninterrupted and constant.

127. (previously presented) The method of claim 126, further comprising projections extending from the uninterrupted and constant circumference of the one end of the tubular member for engaging the spine.

128. (previously presented) The method of claim 103, wherein the step of forming the opening with the first instrument includes the step of forming the opening having arcuate portions.

129. (previously presented) The method of claim 128, wherein the forming step includes the sub-step of forming an opening that is generally cylindrical.

130. (previously presented) The method of claim 103, wherein the positioning step includes the step of positioning the one end of the tubular member in contact with the vertebra of the posterior lumbar spine.

131. (previously presented) The method of claim 103, further comprising the step of placing pressed material into the enlarged opening.

132. (previously presented) The method of claim 103, wherein the material is injectable.

133. (previously presented) The method of claim 132, further comprising the step of injecting the material that is inserted into the enlarged opening.

134. (previously presented) The method of claim 103, further comprising the step of providing the material to be inserted in the form of an elongated portion having a length and a maximum cross sectional dimension perpendicular to the length.

135. (previously presented) The method of claim 134, further comprising the step of pressing the provided material prior to the step of inserting the material into the enlarged opening.

136. (previously presented) The method of claim 134, further comprising the step of pressing the provided material to change the shape of the elongated portion to have a lesser length and a greater maximum cross sectional dimension perpendicular to the length.

137. (previously presented) The method of claim 134, wherein the maximum cross sectional dimension perpendicular to the length is round in cross section.

138. (previously presented) The method of claim 134, wherein the length of the elongated portion is at least 32 millimeters.

139. (new) The method of claim 1, wherein the moving step includes the step of rotating the instrument about the longitudinal axis of the instrument to form the opening into the vertebra.

140. (new) The method of claim 32, wherein the sub-step of inserting an instrument includes the sub-step of rotating the instrument about a longitudinal axis of the instrument to form the opening into the vertebra.

141. (new) The method of claim 67, wherein the forming step includes the step of rotating the first instrument about a longitudinal axis of the first instrument to form the opening into the vertebra.

142. (new) The method of claim 67, wherein the enlarging step includes the step of rotating the second instrument about a longitudinal axis of the second instrument to enlarge the opening into the vertebra.

143. (new) The method of claim 103, wherein the forming step includes the step of rotating the first instrument about a longitudinal axis of the first instrument to form the opening into the vertebra.

144. (new) The method of claim 103, wherein the enlarging step includes the step of rotating the second instrument about a longitudinal axis of the second instrument to enlarge the opening into the vertebra.